

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (original) An automated kitchenware washing tank comprising:
a tank with a wall that defines an enclosure for holding a fluid for washing kitchenware;
outlets in the wall for directing fluid into the tank;
an intake opening in the tank;
a pump system comprising a pump and fluid conduit system coupling the pump between the intake opening and the outlets, whereby the pump is adapted to pump fluid from within the tank through the intake opening into the pump system and through the outlets into the tank at a flow rate; and
a control system comprising a controller coupled to the pump system for causing the pump to pump fluid at least two different flow rates through the outlets, and controls to select between the at least two different flow rates.
2. (original) The automated kitchenware washing tank of Claim 1 wherein the control system further comprises a controller programmed with at least one preset program and wherein the control system allows the preset program to be selected and operated, the program controlling the controller to operate the pump through at least two timed cycles, with different flow rates.
3. (original) The automated kitchenware washing tank of Claim 2 further comprising a cleaner dispenser for dispensing cleaner into the fluid in the tank to facilitate cleaning the kitchenware and wherein the control system is interfaced to the cleaner dispenser for automatically causing the cleaner dispenser to dispense cleaner into the fluid.
4. (original) The automated kitchenware washing tank of Claim 2 further comprising a heater for heating the fluid within the tank and wherein the controller is interfaced to the heater to cause the heater to vary the temperature of the fluid within the tank between the cycles.

5. (original) The automated kitchenware washing tank of Claim 1 wherein the wall of the tank includes a bottom wall and an enclosure wall that extends upwardly from the bottom wall, the enclosure wall having at least one angled portion facing at least partially downwardly, and at least some of the outlets being located on the angled portion.

6. (original) The automated kitchenware washing tank of Claim 1 wherein the enclosure wall of the tank has at least two angled portions facing generally downwardly, wherein the outlets are discharge openings and at least some of the discharge openings are formed in each of the angled portions of the wall to direct the fluid generally downwardly into the tank.

7. (original) The automated kitchenware washing tank of Claim 6 wherein the at least two angled portions comprise two angled portions formed on opposed portions of the enclosure wall.

8. (original) The automated kitchenware washing tank of Claim 7 wherein all of the discharge openings are formed in the angled portions of the enclosure wall.

9. The automated kitchenware washing tank of Claim 7 wherein each angled portion of the wall has at least two rows of discharge openings and at least two discharge openings per row.

10. (original) The automated kitchenware washing tank of Claim 9 wherein the angled portions are at about 75 degrees from horizontal, wherein the discharge openings direct fluid into the tank in a crossing pattern.

11. (original) The automated kitchenware washing tank of Claim 10 wherein each angled portion of the enclosure wall has at least three rows of discharge openings and at least three discharge openings per row.

12. (original) The automated kitchenware washing tank of Claim 7 further comprising an overflow formed on the enclosure wall by an elongated cutaway portion in the upper portion of the enclosure wall.

13. (original) The automated kitchenware washing tank of Claim 8 further comprising a drain having a drain opening in one of the walls with a drain pipe connected to the drain opening to allow the tank to be emptied and a valve coupled to the drain and being operable to open and close the drain, thus allowing the tank to be emptied and filled.

14. (original) The automated kitchenware washing tank of Claim 7 further comprising a heater to heat the fluid in the tank, a heat sensor to detect the temperature of the fluid in the tank, a fluid level sensor to detect whether the fluid is above or below a desired level in the tank.

15. (original) The automated kitchenware washing tank of Claim 14 wherein one of the fluid conduits comprises a plenum that is coupled to the intake opening to form a sump and the heater is disposed in the sump, and wherein the tank further comprises a perforated closure that is hingedly attached to the tank to restrict food debris and dishware from entering the intake opening.

16-31. (cancelled)

32. (original) An automated kitchenware washing tank comprising:
a tank having a wall defining an enclosure for holding a fluid for washing kitchenware;
outlets in the wall for directing fluid into the tank;
an intake opening in the tank;
a pump system comprising a pump and fluid conduit system coupling the pump between the intake opening and the outlets to pump fluid from within the tank through the intake opening into the fluid conduit system and through the outlets into the tank;
A cleaner dispensing system for automatically dispensing cleaner into the fluid; and
a control system coupled to the cleaner dispenser for automatically causing the cleaner dispenser to dispense cleaner into the fluid.

33. (original) The automated kitchenware washing tank of Claim 32 further comprising a fluid level sensor for sensing the level of fluid in the tank, the fluid level sensor being interfaced to the control system to cause the cleaner dispensing system to dispense cleaner into the fluid after the fluid level sensor senses that the tank has been filled with fluid above a desired level.

34. (original) The automated kitchenware washing tank of Claim 33 wherein the cleaner dispenser includes a dispensing outlet that is coupled to the pump system to dispense cleaning agent into the pump system.

35-39. (cancelled)

40. (original) A method of washing kitchenware comprising placing the kitchenware in a tank having a bottom and an enclosure wall for holding fluid, the enclosure wall having at least one generally downwardly facing portion, a plurality of outlets, at least some of which are on the at least one downwardly facing portion, and circulating fluid from the tank and ejecting it through the outlets into the tank.

41. (original) The method of washing kitchenware of Claim 40 further comprising cleaning the kitchenware through a preset program using a control system to automatically cause the preset program to be executed in the tank, the preset program including at least two time cycles during which the flow rate of the fluid through the outlets is different.

42. (original) The method of washing kitchenware of Claim 40 further comprising detecting when the fluid level has dropped below a predetermined level and automatically injecting cleaner into the fluid after detecting that the tank has been refilled.

43. (original) The method of washing kitchenware of Claim 40 wherein the enclosure wall having two generally downwardly facing portions that are generally opposed and a plurality of outlets and circulating fluid from the tank and ejecting it through the outlets.

44. (original) The method of washing kitchenware of Claim 43 wherein the outlets are discharge openings.

45. (original) The method of washing kitchenware of claim 44 wherein the generally downwardly facing portions are at an angle between about 60 and 80 degrees from horizontal.

46. (original) The method of washing kitchenware of claim 44 wherein generally downwardly facing portions are at an angle of about 75 degrees from the horizontal.